# 2   SCHOOL EDUCATION

## 2.1      Introduction

The focus of reporting on school services remains the performance of government primary and secondary schools. These schools educated 74 per cent of primary students and 66 per cent of secondary students in 1996.

However some performance indicators for school education overall, including non-government schools, are reported here for the first time. This reflects governments' responsibility for ensuring that everyone receives school education. To this end, governments regulate non-government schools and contribute to their funding.

This Report measures the outcomes of school education overall in relation to government funding only, rather than in relation to the full cost to the community of providing this service.[1] However, for government schools, efficiency of resource use is also relevant to the performance of government because governments own and manage these schools.

The performance of vocational education and training (VET) undertaken in schools and school activities undertaken within the Technical and Further Education (TAFE) system are not covered in this Chapter.[2]

A framework of effectiveness and efficiency indicators is used to assess performance as with previous Reports.

As the Steering Committee noted in the December 1995 and February 1997 Reports, there is only limited comparable information across jurisdictions for assessing the relative performance of school sectors, particularly in relation to learning outcomes.

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[1]  The full cost to the community of providing school education includes both public and private funding.

[2]  Some VET activity in schools may have been included where it was not possible to identify it separately.

## 2.2 Profile of school education

School education is provided by both government and non-government schools. Government schools are the direct responsibility of State and Territory Governments. Non-government schools operate under conditions determined by State and Territory Government registration authorities and receive significant Commonwealth and State and Territory Government funding.

### 2.2.1 Size and roles

*Student body*

Nationally, there were 2.2 million government and 900 000 non-government full-time school students in 1996. The size of the student population in government schools declined in Victoria, SA, Tasmania and the ACT over the five years 1991 to 1996 and rose in NSW, Queensland, WA and the NT (Figure 2.1).

Figure 2.1:    Annual average growth of full-time students in government schools, 1991 to 1996 (per cent)
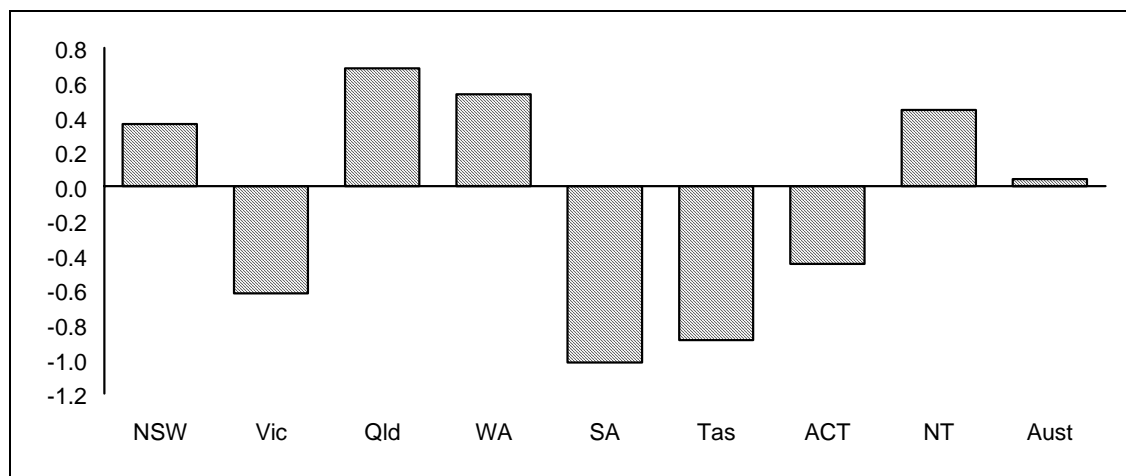


*Sources*: Tables 2A.16; 2A.26; 2A.38; 2A.48; 2A.57; 2A.69; 2A.80; 2A.92

There is considerable difference in the proportions of part-time students in government schools across jurisdictions. The NT, Tasmania and SA had the highest percentage of part-time students to all government secondary students in 1996 and the ACT, NSW and Victoria had the lowest (Table 2.1). These differences should be considered when interpreting data that is sensitive to student numbers.

Table 2.1:      Part-time students in government schools, 1996

|              | NSW   | Vic   | Qld   | WA    | SA    | Tas   | ACT  | NT    | Aust    |
|--------------|-------|-------|-------|-------|-------|-------|------|-------|---------|
| Number[a]    | 1 776 | 2 139 | 5 411 | 4 518 | 5 770 | 2 481 | 13   | 869   | 22 977  |
| Per cent[b]  | 0.6   | 1.0   | 3.7   | 5.7   | 10.1  | 9.3   | 0.1  | 11.5  | 2.7     |

a    Jurisdictions defined part-time students differently.
b    Part-time students as a per cent of all secondary students.
*Source*: Table 2A.5

## *Funding*

School education is one of the largest areas of State and Territory Government expenditure, with government schools accounting for the majority of this expenditure. The Commonwealth Government also plays a role in funding government and non-government schools. Commonwealth, State and Territory Governments spent a total of $12.1 billion on government schools and $2.8 billion on non-government schools in 1995–96.

Government expenditure per full-time student for all schools ranged from $4361 in Victoria to $7495 in the NT in 1995–96. Government expenditure per full-time student in government schools was also lowest in Victoria ($5157) and highest in the NT ($8076) (Figure 2.2).

Figure 2.2:      Government expenditure per student, all schools and government schools, 1995–96 ($)[a,b]
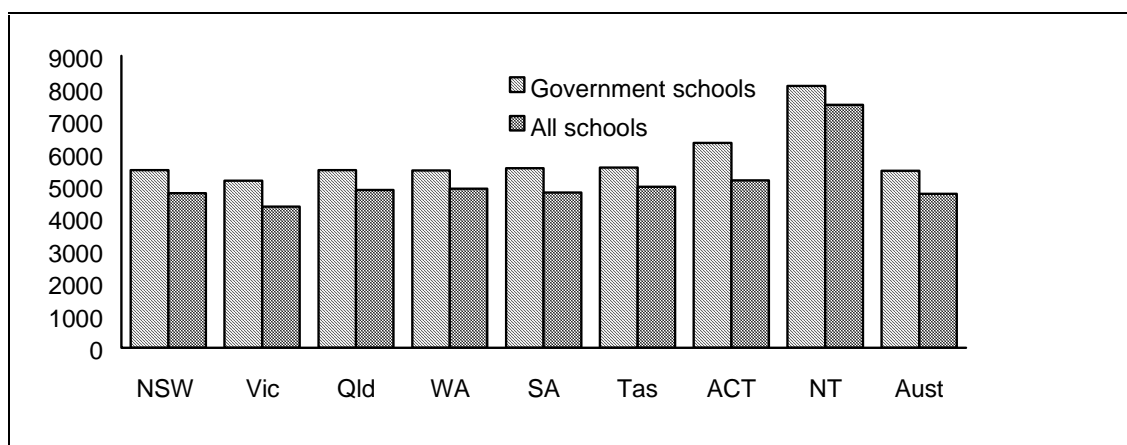


a    Commonwealth, State and Territory Government expenditure was for 1995–96 per full-time student in 1996, except for SA and the ACT where expenditure was for 1996.
b    Expenditure comprised both recurrent and capital expenditure.
*Source*: Table 2A.15

*Roles*

National priorities and strategies for schooling are endorsed by the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA). Schools are responsible for providing education to students by means of a curriculum determined by State and Territory Governments. State and Territory Governments have the constitutional and major responsibility for schooling and are also the major funder.

The Commonwealth Government plays a major role in identifying national priorities for schooling, which it supports with specific purpose payments.

### 2.2.2    Mix of students and schools

The proportion of the population at school and the breakdowns of student numbers between government and non-government schools and primary and secondary schools vary among jurisdictions.

On a per head of population basis , in 1996:

- for primary students in government schools the NT had the highest number and Victoria the lowest;

- for secondary students in government schools Tasmania and the ACT had the highest number and SA the lowest;

- for primary students in non-government schools the ACT had the highest number and Queensland and Tasmania the lowest;

- for secondary students in non-government schools the ACT had the highest number and the NT the lowest;

- for primary students in all schools the NT had the highest number and Victoria the lowest; and

- for secondary students in all schools the ACT had the highest number and SA the lowest (Figure 2.3).

Figure 2.3:      Primary and secondary school students, 1996 (per cent of the total population)a
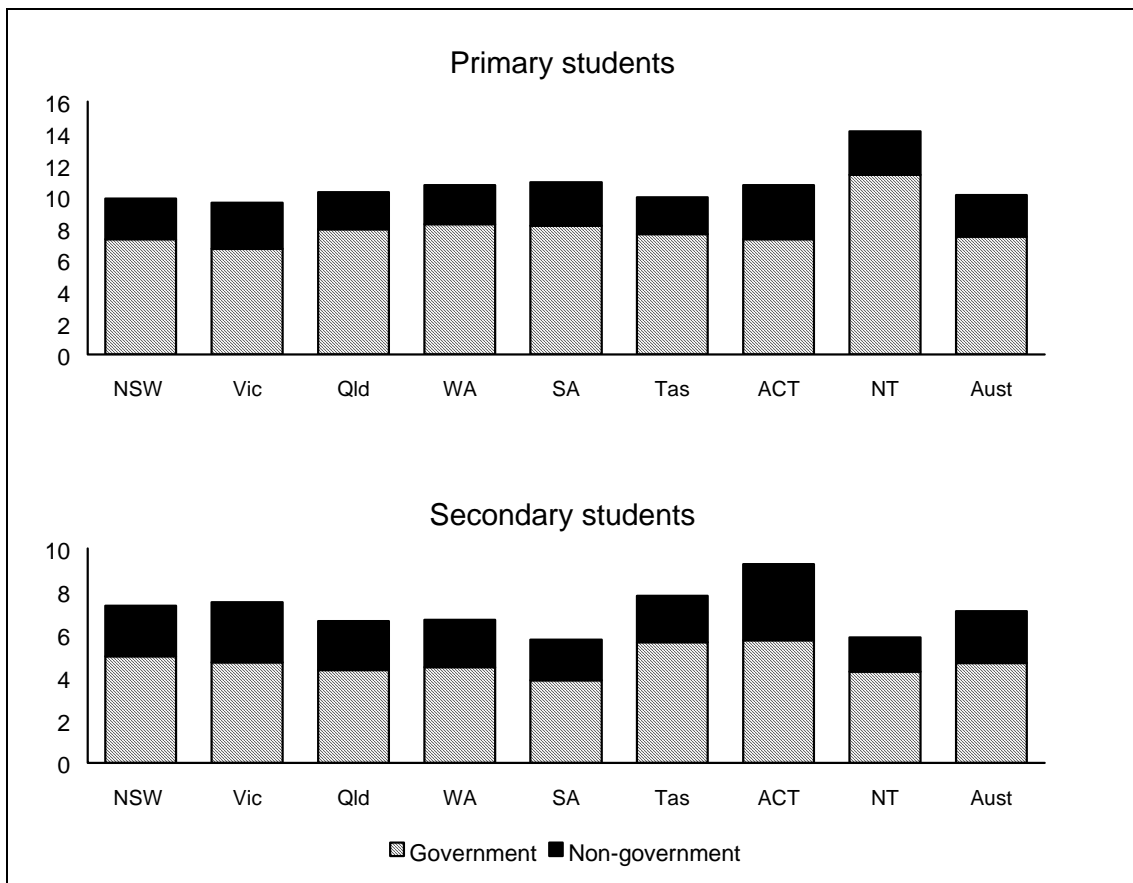


a    Primary school in NSW, Victoria, Tasmania and the ACT extended from pre-year 1 to year 6 and secondary school extended from year 7 to year 12. Primary school in SA and the NT extended from pre-year 1 to year 7 and secondary school extended from year 8 to year 12. Primary school in Queensland and WA extended from year 1 to year 7 and secondary school extended from year 8 to year 12.
*Source*: Table 2A.2

## *Special needs groups*

Various groups of students have been identified as having special needs in education, including students from a low socio-economic status, rural and remote students, and girls. Groups which receive particular attention in this chapter are students from a non-English speaking background, indigenous students and students who have a disability. It is sometimes difficult to accurately identify the proportions of students having special needs in education because definitions differ across states and territories.

The NT had by far the highest proportion of students from an indigenous background, with around 35 per cent of students in this category in 1996. Other

jurisdictions with a relatively high proportion of indigenous students were WA, Tasmania and Queensland.

Government schools in all jurisdictions had a higher proportion of indigenous students and students with a disability than had the school system as a whole. However, this was the reverse for students from a non-English speaking background (Figure 2.4).

Figure 2.4:     Proportion of students from a non-English speaking background, indigenous background or with a disability, 1996 (percent of students)a
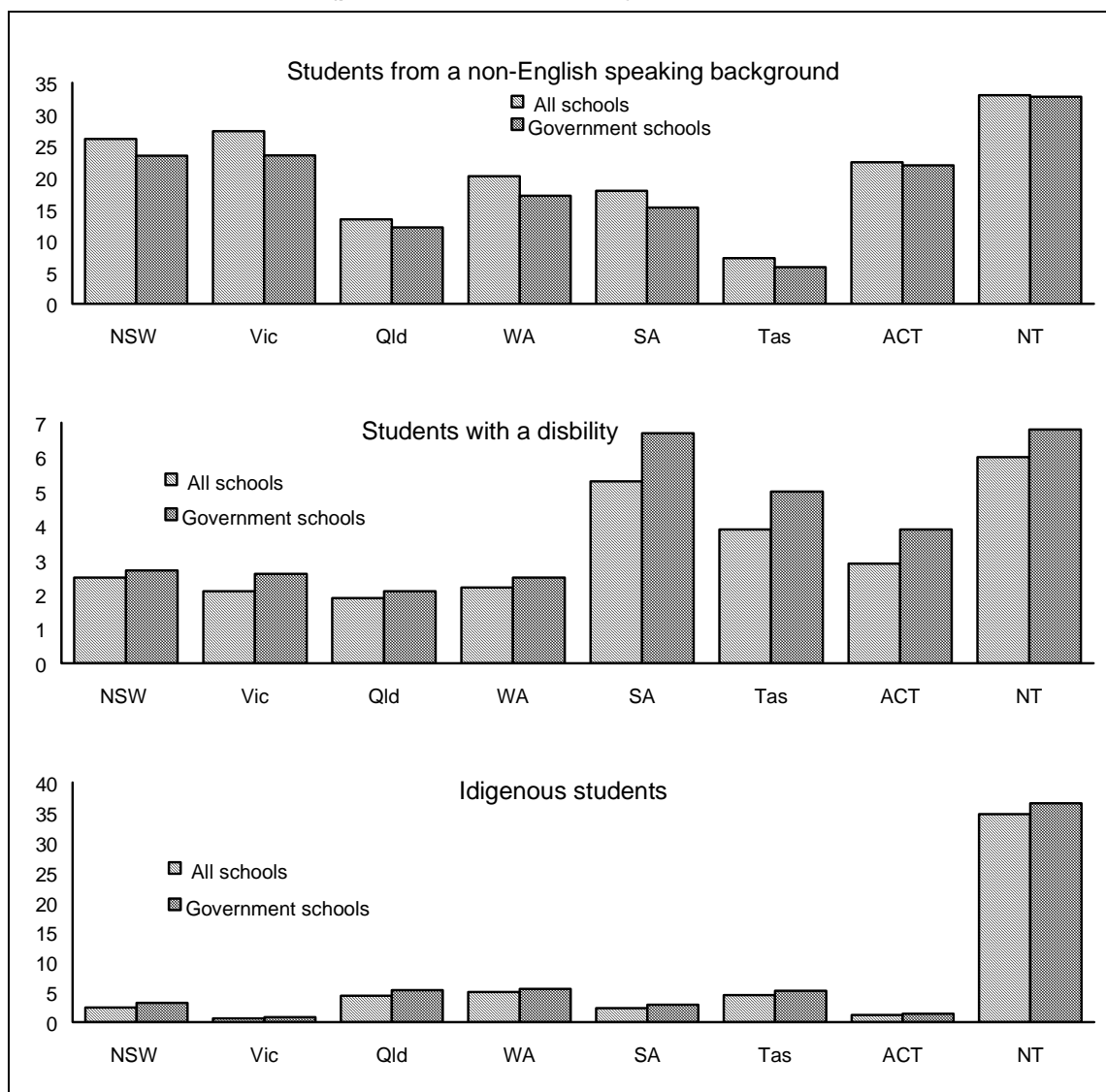


a     There may be some double counting between disadvantaged groups.
*Sources*: Tables 2A.7; 2A.8

## Pattern of year 12 enrolments by key learning area

There was some substantial variation in enrolments in government schools by jurisdiction, particularly for Society and Environment and Health and PE (Table 2.2).

Table 2.2:      Enrolment in key learning areas in year 12, 1996 (per cent)[a]

|  | NSW | Vic | Qld | WA | SA | Tas | ACT | NT |
|---|---|---|---|---|---|---|---|---|
| *All students* | | | | | | | | |
| English | 17.6 | 21.0 | na | 18.7 | 13.6 | na | 22.0 | na |
| Mathematics | 18.9 | 15.4 | na | 18.0 | 17.1 | na | 17.1 | na |
| Society and Environment | 26.0 | 17.8 | na | 13.0 | 25.4 | na | 20.4 | na |
| Science | 12.9 | 16.1 | na | 17.2 | 18.1 | na | 14.1 | na |
| Arts | 6.2 | 9.1 | na | 5.8 | 5.4 | na | 5.9 | na |
| LOTE[b] | 2.8 | 3.2 | na | 2.0 | 2.9 | na | 3.3 | na |
| Technology | 11.0 | 13.3 | na | 14.5 | 12.4 | na | 11.4 | na |
| Health & PE | 4.6 | 4.1 | na | 9.5 | 4.6 | na | 5.8 | na |
| **Total** | **100.0** | **100.0** | na | **100.0** | **100.0** | na | **100.0** | na |
| *Government schools students* | | | | | | | | |
| English | 17.6 | na | 17.4 | 18.7 | 13.7 | 14.2 | 23.2 | 16.8 |
| Mathematics | 18.9 | na | 21 | 17.1 | 16.2 | 11.3 | 17.6 | 18.6 |
| Society and Environment | 23.8 | na | 13.8 | 11.7 | 24 | 25.5 | 16.3 | 22.1 |
| Science | 12.9 | na | 19.9 | 15.8 | 16.8 | 16.2 | 13.6 | 16.1 |
| Arts | 6.7 | na | 8.6 | 6.4 | 5.7 | 8.1 | 7.0 | 7.5 |
| LOTE[b] | 2.6 | na | 2.2 | 1.3 | 2.6 | 12.4 | 3.6 | 3.4 |
| Technology | 12.2 | na | 12.4 | 17.4 | 15.3 | 5.8 | 12.3 | 11.6 |
| Health & PE | 5.4 | na | 4.7 | 10.8 | 5.3 | 2.8 | 6.4 | 3.9 |
| **Not classified** | — | — | — | — | — | 3.6 | — | **0.2** |
| **Total** | **100.0** | na | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** |

na  not available

— not applicable

a   Data were full year equivalent enrolments in each subject as a proportion of total full year equivalent enrolments. Differences in categorisation of subjects into learning areas mean that indices may not be directly comparable across jurisdictions.

b   Languages Other Than English

*Source*: Table 2A.6

Compared with 1995 (Table 2A.6) there were notable rises in Mathematics, Society and Environment and Science enrolments in government schools in Queensland along with falls in Technology and Health and PE enrolments. The NT had a rise in Science and LOTE enrolments and a fall in Society and Environment enrolments in government schools.

## School types

The breakdown of all schools by type (special, combined, primary and secondary) in 1996 showed that:

- the NT, Tasmania and WA had the highest proportions of combined schools;

- the ACT and NSW had the highest proportions of secondary schools; and

- Victoria had the highest proportion of primary schools (Figure 2.5).

Figure 2.5:   Schools by type, all schools and government schools, 1996 (per cent)[a]
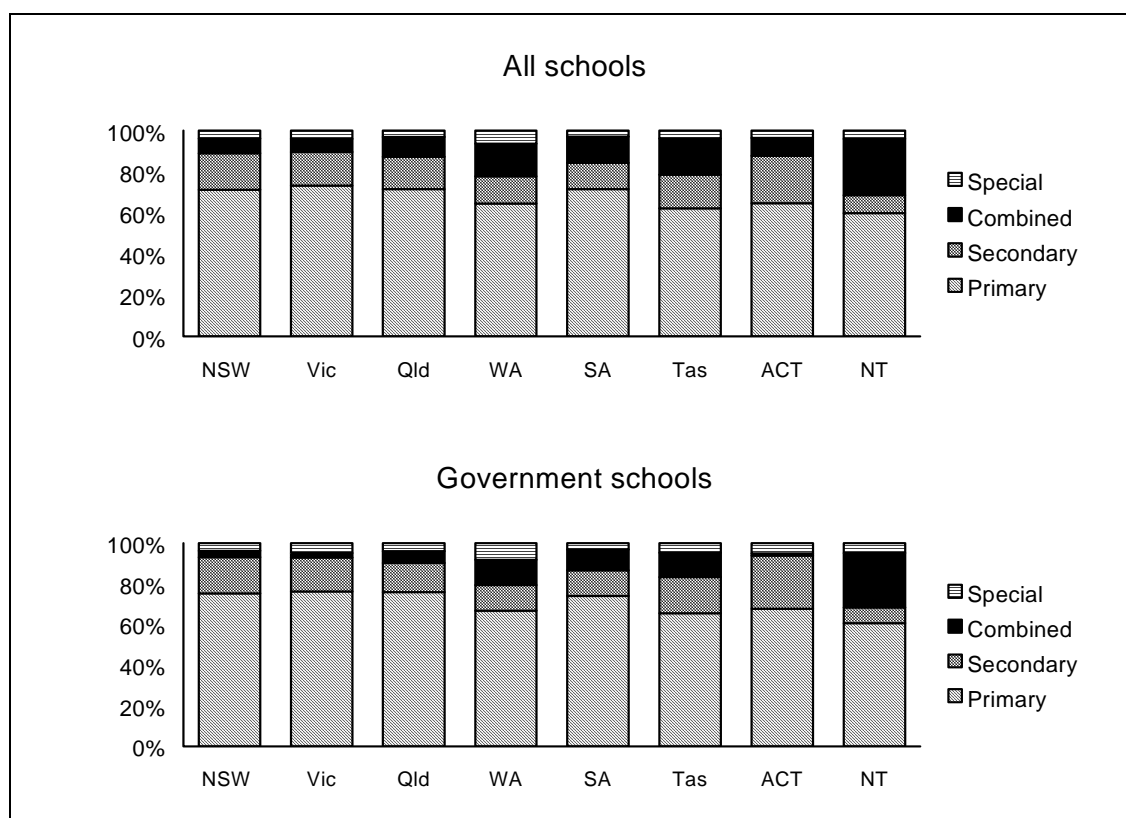


a   *Combined schools* offered both primary and secondary education. *Special Schools* required students to exhibit one or more of the following characteristics before enrolment was allowed: intellectual disability; physical disability; autism; social/emotional disturbance; or be in custody or remand. (Curriculum Corporation 1997).
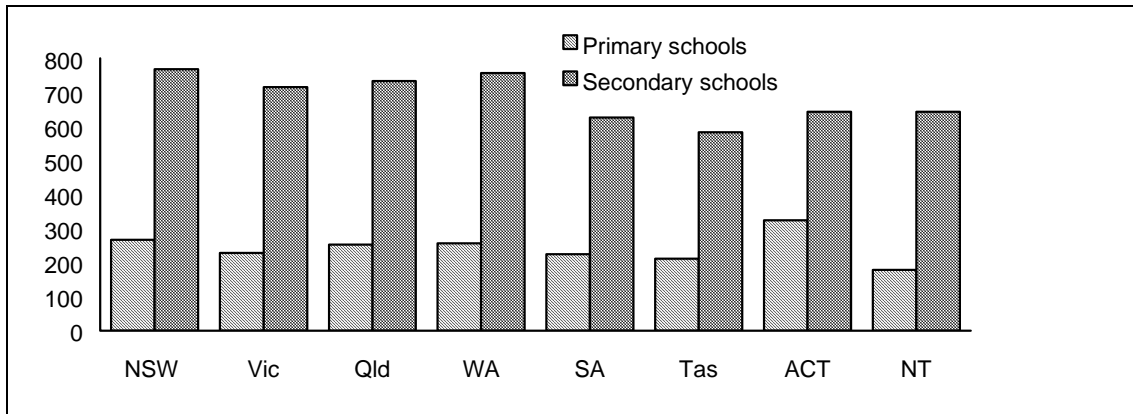*Source*: Table 2A.9

*Mean school sizes*

The mean size of government primary schools in 1996 ranged from 179 students in the NT to 325 in the ACT. The mean size of government secondary schools ranged from 583 students in Tasmania to 768 students in NSW (Figure 2.6).

Figure 2.6:     Mean size of government schools, 1996 (full-time students per school)



*Source*:  Table 2A.1

## 2.3      Recent developments in the sector

Developments in the school sector over the past year included work by MCEETYA in moving towards the establishment of nationally comparable learning outcomes and the release of new information on student learning outcomes.

### 2.3.1     Progress in establishing nationally comparable learning outcomes

The Steering Committee has had an ongoing interest in the establishment of processes which will generate jurisdictional comparisons of learning outcomes for schools. This led the Steering Committee to let a number of consultancies during the past three years. These initially focused on exploring the possible approaches to and, subsequently developing a detailed work plan for, establishing equivalences between existing jurisdictional testing programs.

A detailed work plan was completed in early 1997, but its implementation is on hold pending progress on a March 1997 MCEETYA resolution to provide for assessment of years 3, 5, 7 and 9 students against common literacy and

numeracy benchmarks. The Steering Committee is cooperating with the MCEETYA exercise in order to ensure that the assessments match its requirements for comparable learning outcomes.

MCEETYA approved progress towards years 3 and 5 literacy benchmarks in December 1997. The benchmarks are subject to validation and consultation, with the final sign-off expected in April 1998. Numeracy benchmarks (if approved by MCEETYA for trialing in April 1998) will be trialed by states and territories in conjunction with their own assessment programs.

Benchmark standards describe a minimum standard of achievement at each year level and MCEETYA has agreed that student achievement will be assessed using rigorous state and territory assessment programs. However, the benchmarking taskforce has been requested to examine the possibility of an agreed timing during the school year for assessment against the benchmarks and to make appropriate recommendations.

At least some reporting against the benchmarks is planned for 1999 using the 1998 results from State and Territory Governments.

### 2.3.2     National surveys of student learning outcomes

A number of national surveys of student learning outcomes for the whole school sector have recently been completed or had additional results published. Information was obtained for this Report from the following surveys:

- the 1996 National School English Literacy Survey;
- the ABS survey of aspects of literacy; and
- the Third International Maths and Science Study (Lokan *et al.*).

### 2.3.3     VET in schools

Only limited data were available on the scope of VET in schools. The data on 'school–industry' programs by years and 11 and 12 students — contained in recent reports by the Australian Student Traineeship Foundation (Ainley and Fleming 1997) and the Dusseldorp Skills Forum (1997) — were not regarded as adequate indicators of VET activity in schools across all jurisdictions.[3]

In June 1997 the MCEETYA Taskforce on VET in schools reported to MCEETYA on 'New Apprenticeships and Schools'. This report highlighted the

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[3] Both these reports defined school–industry programs as programs of study whereby a student spends time in a workplace as part of the program.

need for a national approach to data collection which is based on common definitions for school student participation in VET and reflects the variety of courses and methods of program delivery.

In 1998, the MCEETYA Taskforce will oversee a national collection of statistics relating to VET in schools. The information will be collected on the basis of a common definition across all jurisdictions and will include only accredited training programs.

## 2.4      Framework of performance indicators

### 2.4.1      1998 framework of performance indicators

The move to reporting on the whole school sector (including non-government as well as government schools) has required changes to the performance indicator framework used in the last Report.

For school education overall governments are concerned with general community learning outcomes, the extent to which the needs of employers and higher education providers are met and government expenditure efficiency (as governments fund only a proportion of non-government school expenditure the cost effectiveness of the government expenditure rather than total non-government school expenditure is most relevant).

The indicators in this Report are limited to those relating to the general objectives for the school education overall and for government schools only, thus excluding particular objectives that may only apply within the non-government school sector (Box 2.1).

## Box 2.1: Objectives for school education

Education Ministers have agreed to the following Common and Agreed National Goals for Schooling in Australia:

1   To provide an excellent education for all young people, being one which develops their talents and capacities to full potential, and is relevant to the social, cultural and economic needs of the nation.

2   To enable all students to achieve high standards of learning and to develop self-confidence, optimism, high self-esteem, respect for others, and achievement of personal excellence.

3   To promote equality of educational opportunities, and to provide for groups with special learning requirements.

4   To respond to the current and emerging economic and social needs of the nation, and to provide those skills which allow students to maximise flexibility and adaptability in their future employment and other aspects of life.

5   To provide a foundation for further education and training, in terms of knowledge and skills, respect for learning and positive attitudes to life-long education.

6   To develop in students:
a) the skills of English literacy, including skills in listening, speaking, reading and writing;  b) skills of numeracy and other mathematical skills;  c) skills of analysis and problem solving;  d) skills of information processing and computing;
e) an understanding of the role of science and technology in society, together with scientific and technological skills;  f) a knowledge and appreciation of Australia's historical and geographic context;  g) a knowledge of languages other than English;  h)  an appreciation and understanding of, and confidence to participate in, the creative arts;  i) an understanding of, and concern for, balanced development and the global environment; and   j) a capacity to exercise judgement in matters of morality, ethics and social justice.

7   To develop knowledge, skills, attitudes and values which will enable students to participate as active and informed citizens in our democratic Australian society within an international context.

8   To provide an understanding and respect for our cultural heritage, including the particular cultural background of Aboriginal and ethnic groups.

9   To provide for the physical development and personal health and fitness of students, and for the creative use of leisure time.

10  To provide appropriate career education and knowledge of the world of work, including an understanding of the nature and place of work in our society.

11  That every child leaving primary school should be numerate, and be able to read, write and spell at an appropriate level; with the subgoal that every child commencing school from 1998 will achieve a minimum acceptable literacy and numeracy standard within four years.

In addition, all governments aim to use funds and deliver schooling efficiently.

An indicator framework built around these objectives is summarised in Figure 2.7.

Figure 2.7:     School education overall — performance indicator framework
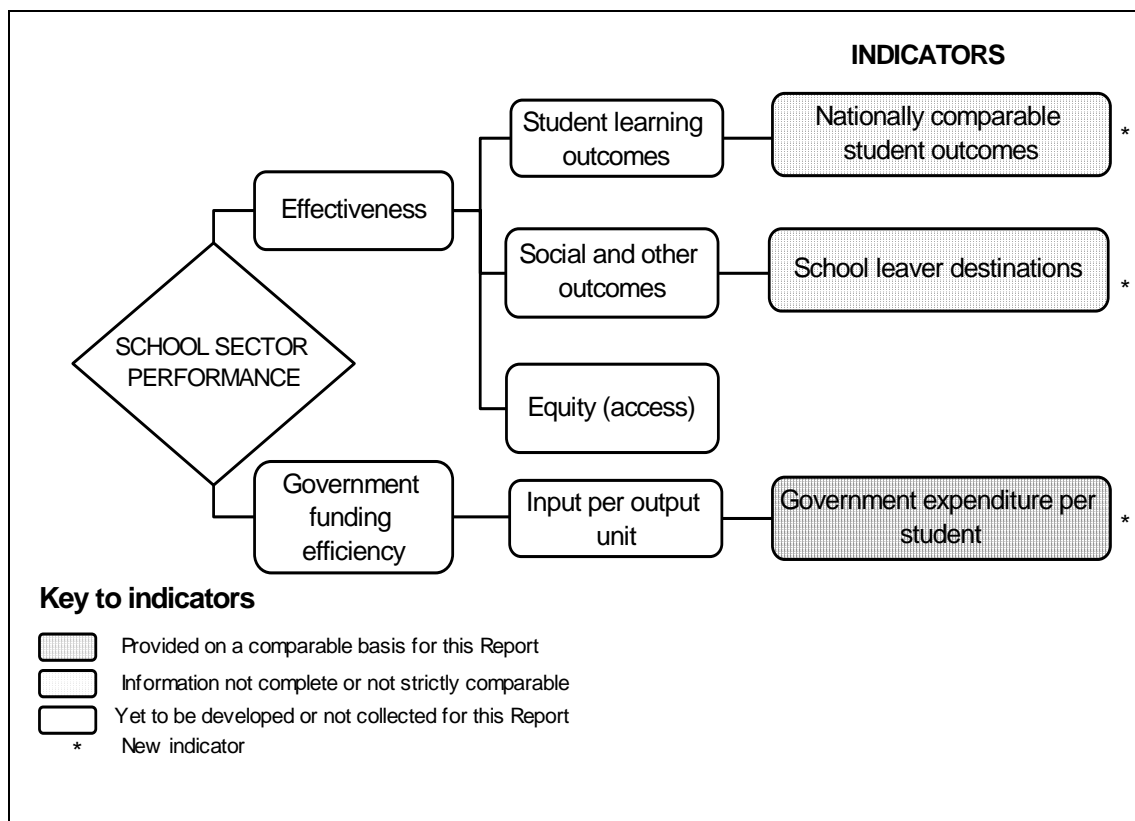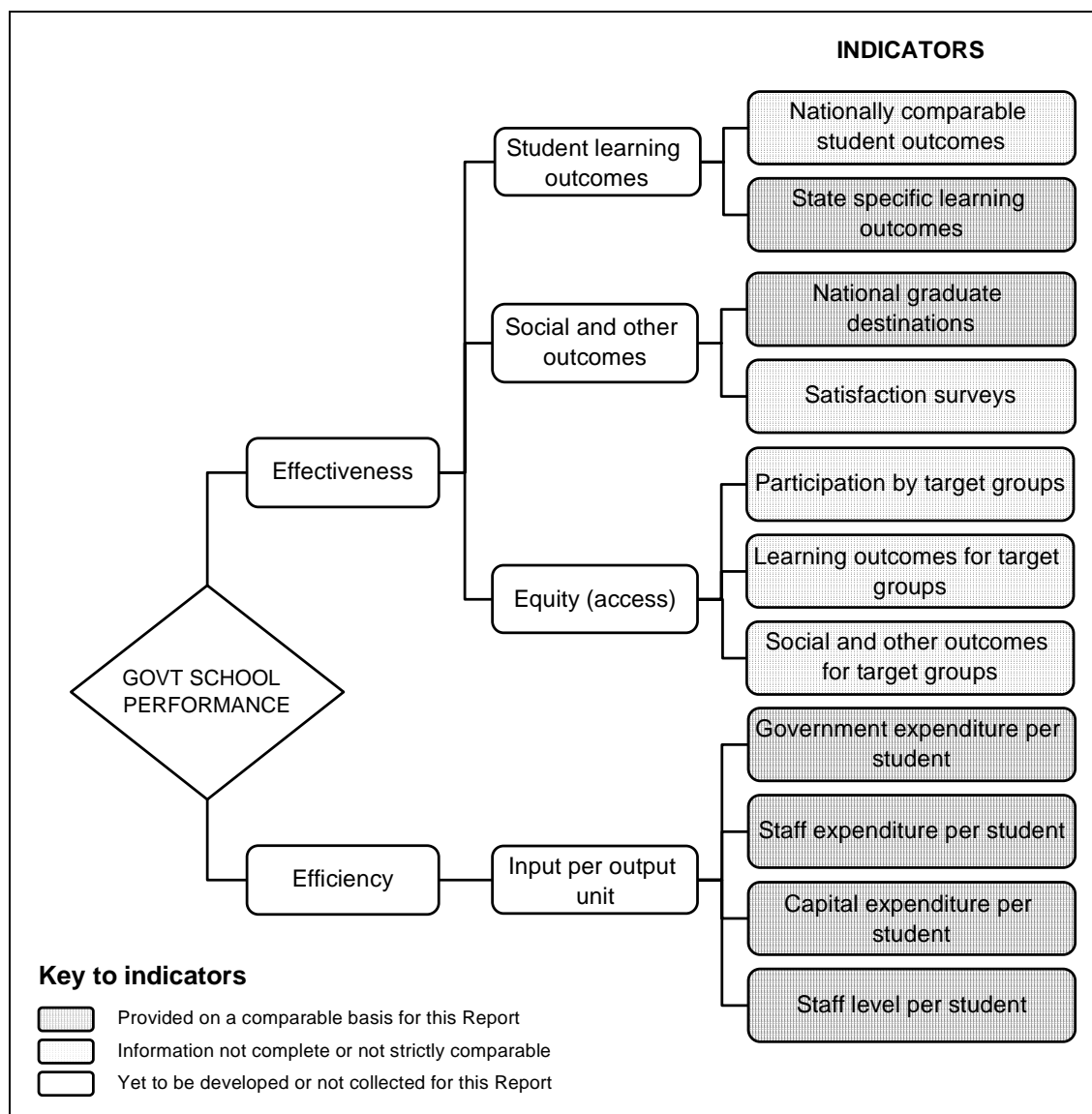


The operational performance of government schools particularly concerns governments as they own and manage these schools. Issues such as access and equity are particularly relevant given the responsibility of government schools to provide access to education for all.[4] The reporting framework for government schools is shown in Figure 2.8.

Definitions of all indicators are provided in Attachment 2A.

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[4]  Access and equity are also important issues for government funding and regulation of non-government schools.

Figure 2.8:    Government schools — performance indicator framework



**INDICATORS**

GOVT SCHOOL PERFORMANCE

Effectiveness
- Student learning outcomes
  - Nationally comparable student outcomes
  - State specific learning outcomes
- Social and other outcomes
  - National graduate destinations
  - Satisfaction surveys
- Equity (access)
  - Participation by target groups
  - Learning outcomes for target groups
  - Social and other outcomes for target groups

Efficiency
- Input per output unit
  - Government expenditure per student
  - Staff expenditure per student
  - Capital expenditure per student
  - Staff level per student

**Key to indicators**

Provided on a comparable basis for this Report

Information not complete or not strictly comparable

Yet to be developed or not collected for this Report

## 2.5    Future directions

There remains scope to improve the quantity, quality and timeliness of information used to assess the performance of both the whole school sector and government schools across Australian jurisdictions. The development of ongoing comparable learning outcome information is particularly vital.

### 2.5.1 Learning outcomes

Further progress has been made this year in the reporting of learning outcome indicators. A number of new indicators are reported here for the first time, these include: results from the first National School English Literacy Survey; jurisdictional results from the ABS survey of Aspects of Literacy for 15 to 19 year olds; results of middle primary school students from the Third International Mathematics and Science Study; results from primary school literacy assessment in the ACT; and results from secondary school numeracy assessment in Tasmania.

The above information is useful but it does not fully meet the reporting requirements of the Steering Committee for ongoing outcomes information which is nationally comparable and statistically valid.

The Steering Committee is closely following the work of MCEETYA in developing processes to produce national learning benchmarks information. It will endeavour to report these results when they become available, providing they are:

- comparable across jurisdictions;
- ongoing; and
- delivered to a suitable timetable.

### 2.5.2 Other framework gaps

Gaps remain in the reporting of both the social objectives of schooling and comparable information on access and outcomes for special needs groups. However, these gaps may be addressed in the future by drawing on a number of research projects. The Australian Council for Educational Research is completing a study on the social objectives of schooling (funded by the Department of Employment, Education, Training and Youth Affairs). The University of Melbourne has conducted a project on whether students agreed that their schools met various social outcomes of schooling for both government schools and all schools. The data were not available in time to report the outcomes at the jurisdictional level but may be covered in the 1999 Report.

## 2.6 Key performance results — effectiveness

Jurisdictional comparisons of learning outcomes on an ongoing consistent basis, a key outcome indicator for schools, are still unavailable. While all jurisdictions conduct learning outcome tests, they generally employ different tests (with the

exception of NSW and SA) and vary in terms of the year levels and subject areas tested. Some jurisdictionally comparable outcomes data are available but they are from one-off surveys and cover only a limited number of year levels.

The existing jurisdictional tests provide outcomes information for individual jurisdictions over time and, in NSW and Victoria, comparative performance of both indigenous students and students from a non-English speaking background.

## 2.6.1 National School English Literacy Survey

The National School English Literacy Survey (Masters and Forster 1997) measured reading, writing, listening, speaking and viewing abilities of years 3 and 5 students in government and non-government schools. The survey, conducted in August/September 1996, was based on a nationally representative sample of 7453 students in years 3 and 5 (the 'main sample') and a special sample of 773 indigenous students in these same year levels. The survey did not provide a breakdown of results by jurisdiction, but it had findings for a number of sub-groups, including special needs groups.

The Literacy Standards in Australia Report (Masters 1997) used the results from the National School English Literacy Survey to assess the reading and writing standards of years 3 and 5 students. These standards specify the minimum acceptable levels of performance for the tasks used in the survey. The performance standards were set with reference to the work on developing national literacy benchmarks. The results of the survey were reported as the percentage of students meeting the standards for reading and writing.

Key findings of the Literacy Standards in Australia Report were:

- approximately 70 per cent of students in years 3 and 5 in the main sample met the performance standards;

- a higher percentage of females than males in the main sample met the standards in both year levels;

- more students from an English speaking background than from a non-English speaking background in the main sample met the standards;

- achievement of standards was positively related to socio-economic status; the proportion of students tested from a high socio-economic background who achieved the standards was at least 20 percentage points above that for students tested from a low socio-economic background; and

- low proportions (less than 30 per cent) of indigenous students tested met the standards (Figure 2.9).

Figure 2.9      National School English Literacy Survey, years 3 and 5 students who met the reading and writing standards, 1996 (per cent)
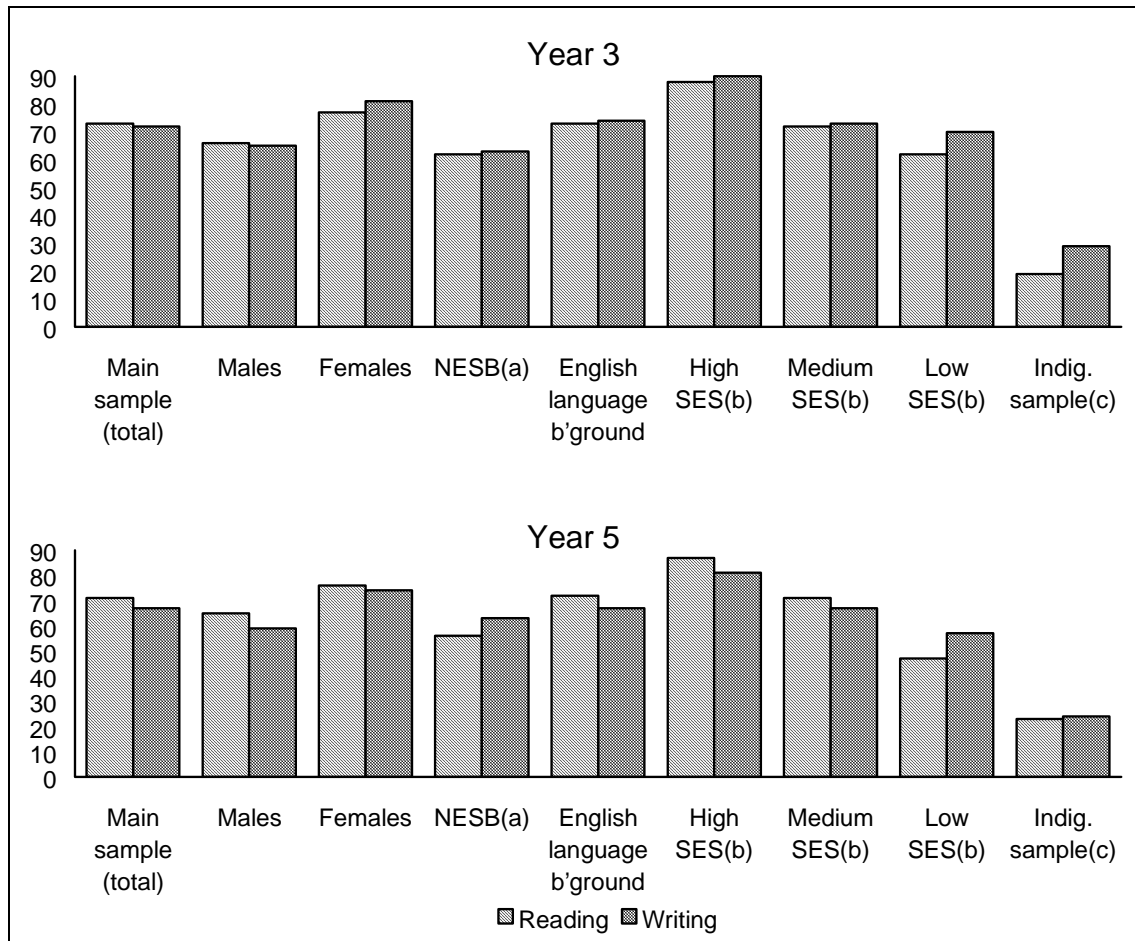


a    NESB referred to students from a non-English speaking background.

b    SES referred to socio-economic status.

c    The results for the indigenous students were based on a special sample of indigenous students, of which a large number lived in rural and remote areas.

*Source*: Table 2A.11

## 2.6.2    ABS survey of aspects of literacy

A recent ABS literacy survey (ABS 1997) was designed to assess the literacy skills of people aged 15 years and over, but not students specifically. There was no control for differences in the level of educational attainment, but the skills of the people in the survey's 15 to 19 age group (given the recency of their schooling) could reasonably be expected to indicate school education outcomes. Nonetheless, the data should be interpreted with care because the survey does

not control for differences in the level of educational attainment and some jurisdictional results are based on very small samples (Table 2.3).

Table 2.3:     Literacy skill level attained by persons aged 15 to 19 years, 1996 (per cent)a

| Level | NSW | Vic | Qld | WA | SA | Tas | ACT | NT | Aust |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|------|
| *Prose skill level* | | | | | | | | | |
| 1 | 13.3 | 12.0 | 22.5 | 19.6 | **7.8 | **10.7 | **13.9 | **6.6 | 14.8 |
| 2 | 34.6 | 30.2 | 23.3 | 26.0 | 27.1 | 37.1 | **41.4 | **56.1 | 30.4 |
| 3 | 40.7 | 40.6 | 39.4 | 31.5 | 49.3 | 40.5 | **35.4 | **27.1 | 40.0 |
| 4 to 5 | 11.3 | 17.1 | 14.8 | 22.8 | **15.8 | **11.8 | **9.3 | **10.2 | 14.9 |
| *Document skill level* | | | | | | | | | |
| 1 | 11.2 | 12.2 | 14.1 | **12.6 | **11.3 | **10.7 | **9.3 | – | 12.0 |
| 2 | 37.8 | 28.3 | 27.5 | 30.1 | 33.8 | 43.3 | **36.1 | **62.7 | 32.8 |
| 3 | 42.8 | 39.4 | 42.0 | 37.9 | 37.0 | 36.6 | 45.4 | **37.3 | 40.7 |
| 4 to 5 | **8.3 | 20.1 | 16.4 | 19.4 | **17.9 | **9.4 | **9.3 | – | 14.6 |
| *Quantitative skill level* | | | | | | | | | |
| 1 | 15.6 | 15.2 | 20.5 | 19.1 | **13.4 | **15.5 | **9.3 | **6.6 | 16.4 |
| 2 | 39.7 | 34.8 | 28.8 | 26.9 | 33.7 | 44.3 | 45.4 | **56.1 | 35.1 |
| 3 | 37.3 | 34.7 | 36.8 | 41.9 | 41.2 | **25.7 | **24.6 | **37.3 | 36.8 |
| 4 to 5 | **7.4 | 15.2 | 13.9 | **12.1 | **11.6 | **14.4 | **20.8 | – | 11.7 |

–   not applicable
**  Sampling variability was too high for comparisons to be made for most practical purposes.
a   Higher level numbers represent higher skill levels. The levels represent a continuum of how well people were able to interpret and use material printed in English for each of the three types of literacy (prose, document and quantitative). Progression along the continuum was characterised by increased ability to process information (for example, to locate, match and generate information) and to draw correct inferences based on the information being used.
*Source*: Table 2A.12

About half of the 15 to 19 year olds tested had literacy skills in the lowest two levels of skill. Relatively few persons tested achieved the highest skill levels (level 4 or 5). There appeared to be higher proportions of persons tested attaining the higher skill levels (levels 3, 4 or 5) in WA, Victoria, SA and Queensland than in the other jurisdictions, recognising the limitations caused by small sample sizes for the less populous jurisdictions.

### 2.6.3    Third International Mathematics and Science Study

Results from the Third International Mathematics and Science Study (which compared performance across 45 different countries in 1994) have now been published for middle primary school and junior secondary students for Australian states and territories (Masters and Forster 1997). Junior secondary results were included in the 1997 Report.

Relative performances across jurisdictions were very similar for primary students in both mathematics and science. Tested students in Queensland, WA and SA had the highest average achievement scores, and those tested in NSW, Victoria and Tasmania had the lowest. However, in assessing these scores, differences in years of primary schooling across the jurisdictions, notably for SA and Tasmania, should be considered (Figure 2.10).

Figure 2.10:    Third International Mathematics and Science Study — achievement of primary students, 1994 (mean achievement scores)[a, b]
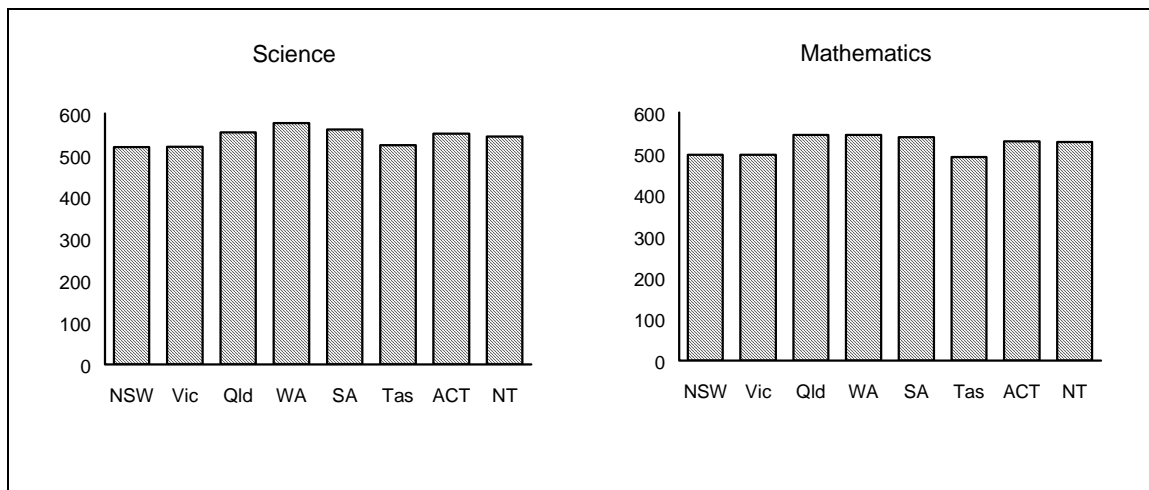


a    Achievement was standardised against the international mean score of 500.

b    The mean years of full-time schooling for students in each jurisdiction undertaking the tests was as follows:

| NSW | Vic | Qld | WA | SA | Tas | ACT | NT |
|-----|-----|-----|-----|-----|-----|-----|-----|
| 4.25 | 4.22 | 4.28 | 4.25 | 5.20 | 4.03 | 4.35 | 5.14 |

*Source*: Table 2A.10

### 2.6.4    NSW Basic Skills Test

The NSW Basic Skills Test is an annual census program designed to measure years 3 and 5 student achievement in aspects of literacy and numeracy. Students' achievement is reported on the basis of mean test scores.

A comparison of mean test scores over 1994 to 1996 reveals that:

- there was virtually no change in the mean scores of year 3 students tested for both literacy and numeracy;

- both literacy and numeracy results for year 5 students tested did not show any significant change; and

- indigenous (Aboriginal and Torres Strait Islander) students tested had a consistently lower level of achievement than that of all students tested (Figure 2.11 and Figure 2.12)

Figure 2.11: NSW Basic Skills Test results for year 3, 1994 to 1996 (mean test scores)[a,b]



a  Re-scaling of 1994 and 1995 results was undertaken to make them comparable with 1996 results. The new common scale ranged from 25 to 65.

b  Literacy and numeracy scores were not comparable.

c  Aboriginal and Torres Strait Islander students.

d  NESB1 (non English speaking background) were those students who answered 'yes' to the question 'Does anyone speak a language other than English in your home?'

e  NESB2 (non English speaking background) were those students who had lived in Australia for four years or less and never or only sometimes spoke English at home.

f  ESB (English speaking background) students were those who answered 'no' to the question 'Does anyone speak a language other than English in your home?'

*Source*: Table 2A.21

Consistently similar performances were achieved by students tested from a non-English speaking background and the general student population tested (Figure 2.11 and Figure 2.12). This contrasts with the results of the National School English Literacy Survey, which indicated that Australia-wide, students tested from this group were more likely to display a lower level of achievement than students tested from an English speaking background.

Figure 2.12:    NSW Basic Skills Test results for year 5, 1994 to 1996 (mean test scores) [a,b]



a    Re-scaling of 1994 and 1995 results was undertaken to make them comparable with 1996 results. The new common scale ranged from 25 to 65.
b    Literacy and numeracy scores were not comparable.
c    Aboriginal and Torres Strait Islander students.
d    NESB1 (non English speaking background) were those students who answered 'yes' to the question 'Does anyone speak a language other than English in your home?'
e    NESB2 (non English speaking background) were those students who had lived in Australia for four years or less and never or only sometimes spoke English at home.
f    ESB (English speaking background) students were those who answered 'no' to the question 'Does anyone speak a language other than English in your home?'
*Source*: Table 2A.21

### 2.6.5 Victorian Learning Assessment Project

The Victorian Learning Assessment Project (LAP) reported the percentage of students in years 3 and 5 reaching the Curriculum and Standards Framework (CSF) levels expected of students at various points in their schooling (Figure 2.13).[5]

Figure 2.13: Victorian Learning Assessment Project results, 1997 (percentage of students achieving CSF level)[a,b]
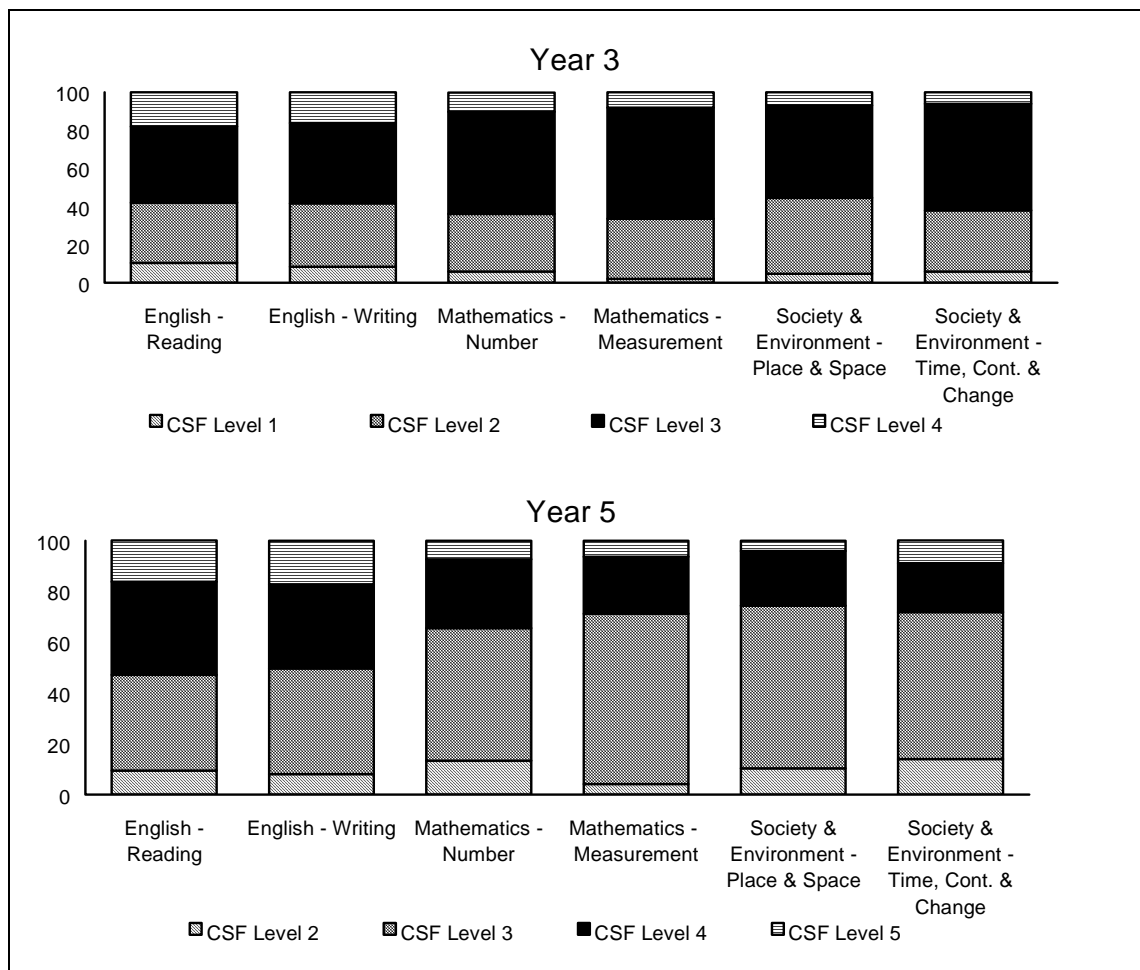


a   CSF Level 1 is the standard expected for students on completion of the first (preparatory) year of schooling, level 2 to the end of year 2, level 3 to the end of year 4, level 4 to the end of year 6 and level 5 to the end of year 8. CSF Level 5 was not applicable for year 3 students and CSF Level 1 was not applicable for year 5 students.
b   Results were for government and non-government schools combined.
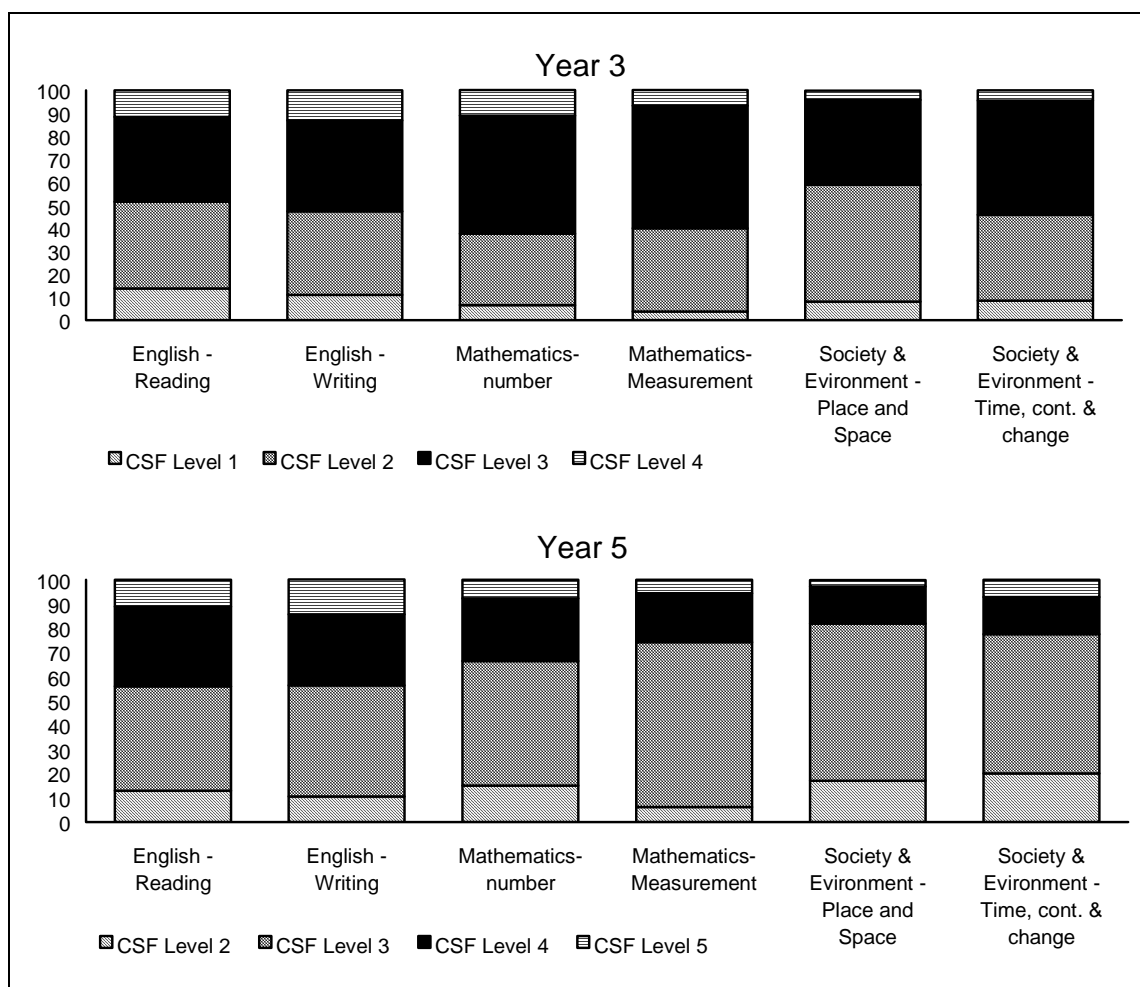*Source*: Table 2A.32

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[5] Level 1 is the standard expected for students on completion of the first (preparatory) year of schooling, level 2 to the end of year 2, level 3 to the end of year 4, level 4 to the end of year 6 and level 5 to the end of year 8.

A consideration of results needs to take account of the fact that LAP tests are done early in the school year but students are not expected to reach the desired CSF level before year end.

Most year 3 students tested attained the expected CSF level for that year for all subject areas in 1997. Most year 5 students tested achieved the CSF level expected for year 4 students, particularly in the subject areas other than English. Aboriginal and Torres Strait Islander students' results were substantially below those of all students in 1997, and particularly so for year 5 (Figure 2.14).

Figure 2.14:   Victorian Learning Assessment Project results for indigenous students, 1997 (percentage of students achieving CSF level)[a,b]
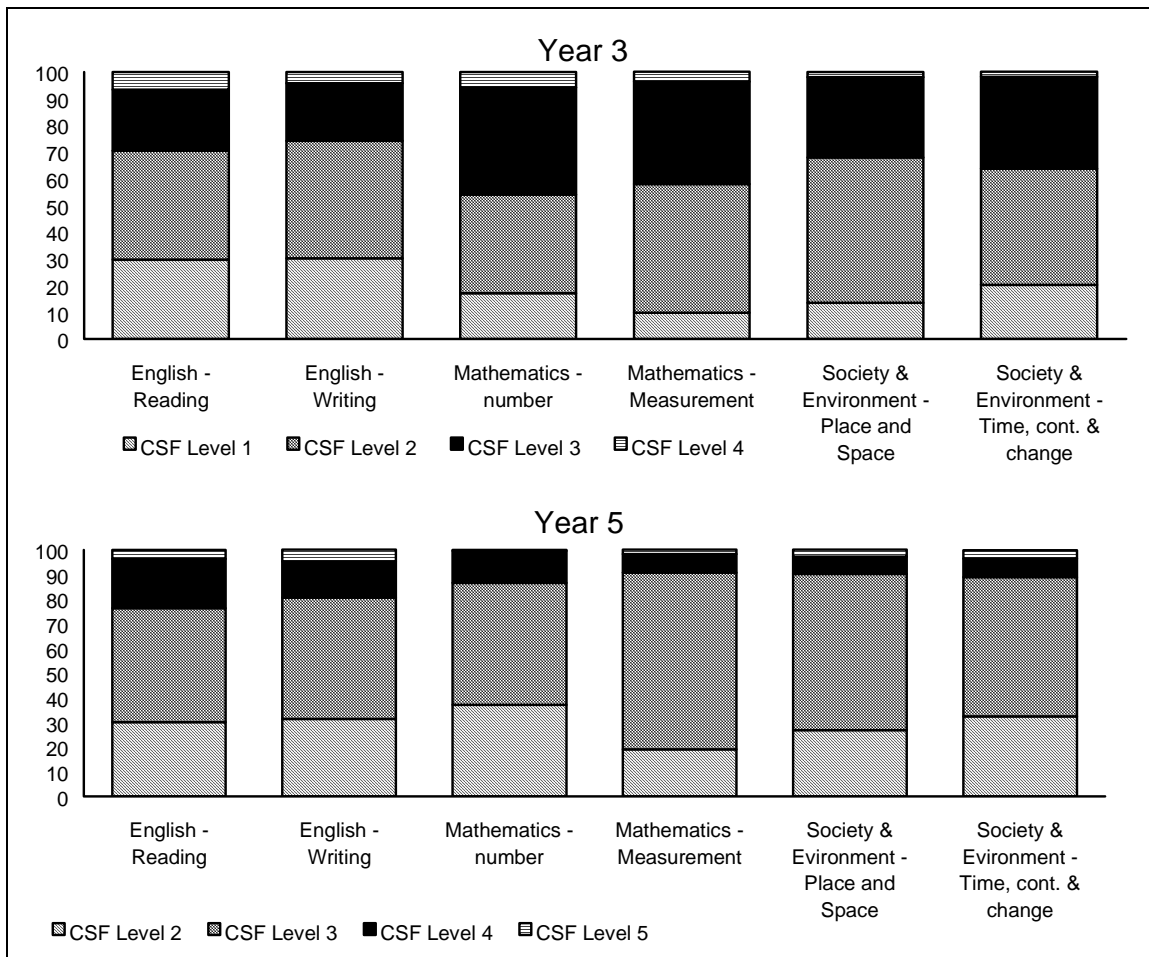


a    CSF Level 1 is the standard expected for students on completion of the first (preparatory) year of schooling, level 2 to the end of year 2, level 3 to the end of year 4, level 4 to the end of year 6 and level 5 to the end of year 8. CSF Level 5 was not applicable for year 3 students and CSF Level 1 was not applicable for year 5 students.
b    Results were for government and non-government schools combined.
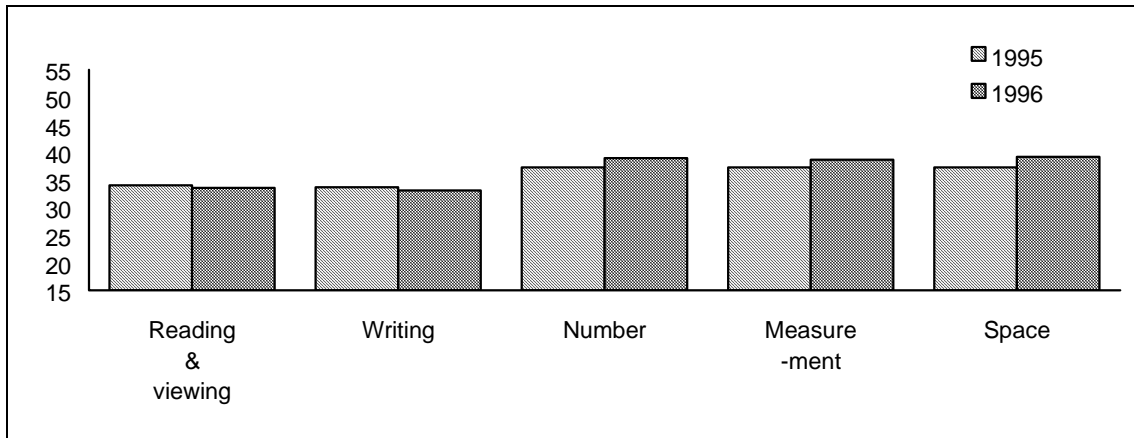*Source*: Table 2A.32

Year 5 students from a non-English speaking background tested on average achieved a CSF level below that of the standard expected. However, year 3 students from a non-English speaking background tested generally achieved their expected CSF level or above, with the exception of Reading and Society and Environment (Figure 2.15).

Figure 2.15:    Victorian Learning Assessment Project results for students from non-English speaking backgrounds, 1997 (percentage of students achieving CSF level)[a,b]



a    CSF Level 1 is the standard expected for students on completion of the first (preparatory) year of schooling, level 2 to the end of year 2, level 3 to the end of year 4, level 4 to the end of year 6 and level 5 to the end of year 8. CSF Level 5 was not applicable for year 3 students and CSF Level 1 was not applicable for year 5 students.
b    Results were for government and non-government schools combined.
*Source*: Table 2A.32

## 2.6.6      Queensland Year 6 Test

In the 1997 Report, a comprehensive range of results from Queensland's Assessment of Performance Program was reported for the period 1987 to 1994. However, as a comprehensive range of new test results was not available for reporting this year, the results from the Queensland Year 6 Test for 1995 and 1996 are highlighted instead.

The Year 6 Test reports performance for the learning areas of reading and viewing, writing, number, measurement and space. Results appear as mean scores on a scale of 15 to 55. There was a very slight fall in the mean scores for reading and viewing and writing performance, but an improvement in the mean scores for number, measurement and space between 1995 and 1996 (Figure 2.16).

Figure 2.16:    Queensland Year 6 Test, 1995 and 1996 (mean score)[a]



a    The scale of the test scores was from 15 to 55.
*Source*: Table 2A.45

## 2.6.7      WA Monitoring Standards in Education

The WA Monitoring Standards in Education project tested performance of a sample of students across a range of curriculum areas in years 3, 7 and 10. The results are reported as the percentage of students achieving a specified standard.

For the results in reading and writing for 1992 and 1995 and for mathematics in 1992 and 1996:

•       there did not appear to be any overall upward or downward trends — results in four of the nine year/skills areas improved but they deteriorated in four others;

- there was a slight fall in the proportion of year 3 students tested meeting the specified level for reading and writing, but no change for maths;

- there was a slight rise in the proportion of year 7 students tested meeting the specified level in reading and maths, but a slight fall for writing; and

- there was a slight rise in the proportion of year 10 students tested reaching the specified level for writing and a larger increase in performance for maths, but a slight fall for reading (Figure 2.17).

Figure 2.17: WA Monitoring Standards results for reading, writing and maths, 1992 and 1995, (percentage of students achieving the specified level)[a,b]
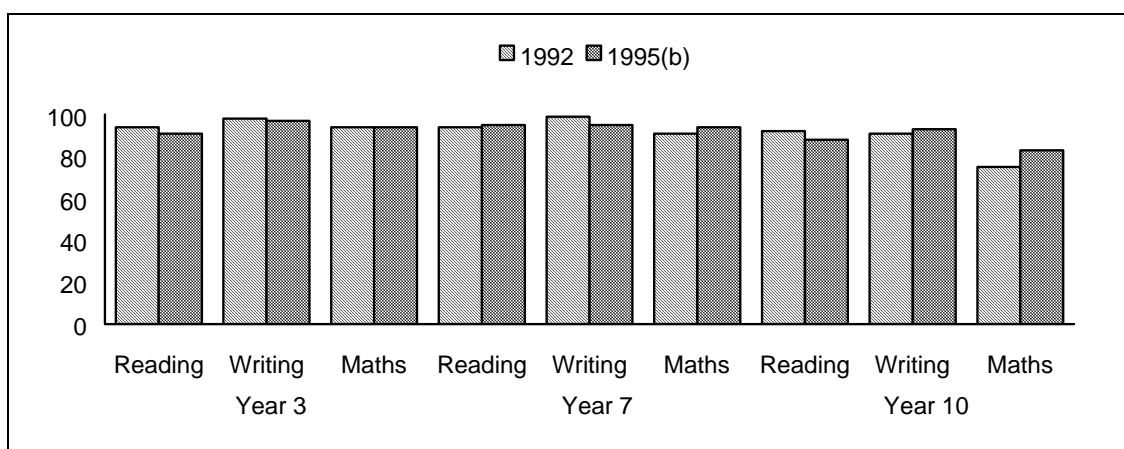


a   The specified levels for each year level were: ≥ Level 2 for year 3; ≥ Level 3 for year 7; and ≥ Level 4 for year 10.
b   The second year for the maths results was 1996.
*Source*: Table 2A.54

## 2.6.8    SA Basic Skills Test

The SA Department for Education, Training and Employment has monitored years 3 and 5 student achievement in aspects of literacy and numeracy through the Basic Skills Tests since 1995. The literacy test results for years 3 and 5 students tested remained fairly constant over the three year period 1995 to 1997. However, the numeracy test results for year 3 students tested indicated a slight downward trend between 1995 and 1997 (Figure 2.18).

Figure 2.18:    SA Basic Skills Test results for years 3 and 5 students,
                1995 to 1997 (mean scores)

### 2.6.9    Tasmanian reading and numeracy tests

Tasmania has had a program of standardised tests for reading and numeracy skills in place for over twenty years. The tests were originally of 10 and 14 year olds, but in 1996 students were tested by school year level (years 5 and 9).

For 10 year olds tested, there was a slight downward trend in reading performance between 1976 and 1993, but evidence of an improvement between 1993 and 1996. For 14 year olds tested, there was a high degree of variability in numeracy performance over the past 20 years, making it difficult to ascertain any upward or downward trend (Figure 2.19).

Figure 2.19:    Tasmanian reading and numeracy test results, 1976 to 1997 (index)



Reading performance, 10 year olds(a)

Numeracy performance, 14 year olds(b)
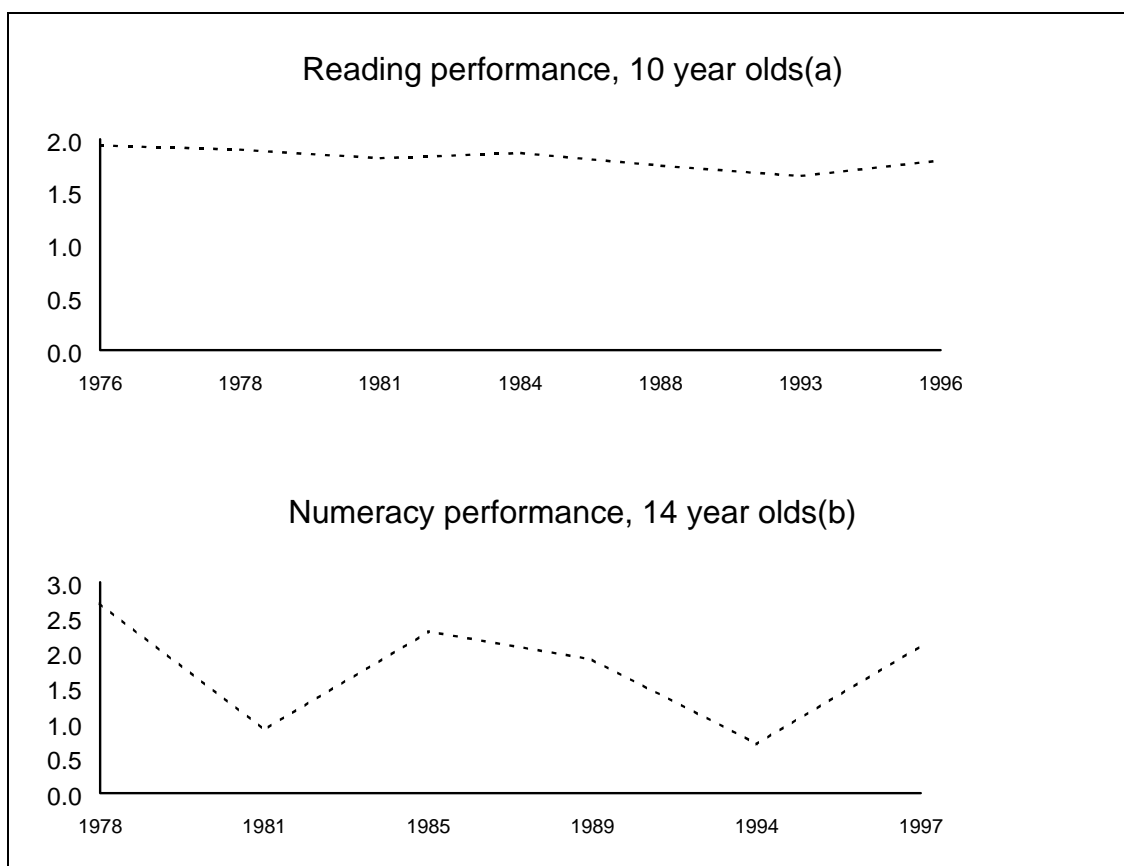
a    Between 1976 and 1993 reading performance results were for 10 year olds. The 1996 results were for students in year 5.

b    Between 1978 and 1994 numeracy performance results were for 14 year olds. The 1997 results were for students in year 9.

*Sources*: Tables 2A.73; 2A.74

## 2.6.10    ACT primary student literacy assessment

Literacy assessment was undertaken for the first time in the ACT during 1997, so no comparison with previous years was possible. Tests were for primary students in years 3 and 5 and the results were reported as the percentage of students achieving particular national profile levels.

Higher proportions of students tested in year 3 achieved level 3 or 4 for writing, listening and speaking than for the other areas (reading and viewing). The proportion of year 5 students tested achieving at the highest two skill levels was lower for writing and speaking skills compared with the proportions for other skills (Figure 2.20).

Figure 2.20:   ACT Literacy Assessment of years 3 and 5 students, 1997 (percentage at National Profile Levels)
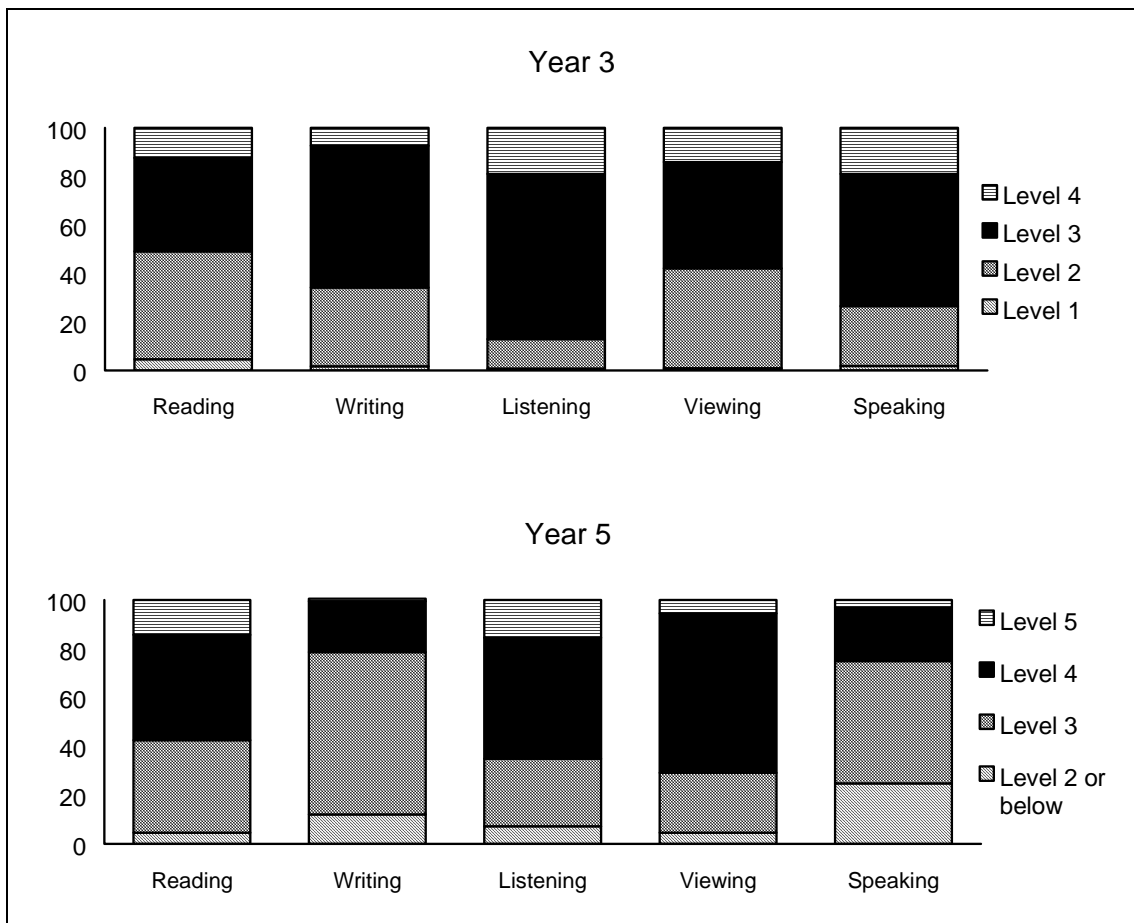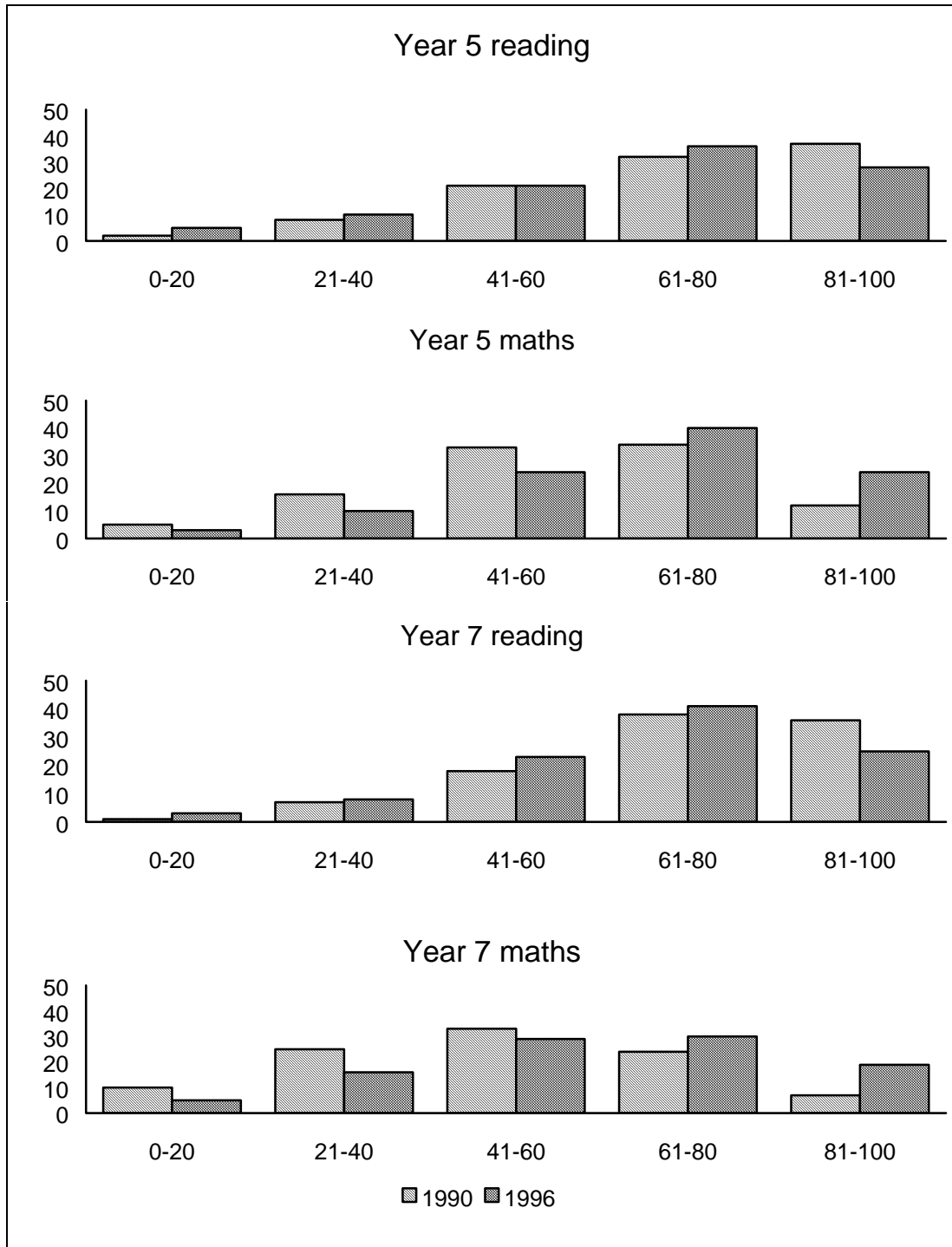


*Source*: Table 2A.88

## 2.6.11   NT Multi-level Assessment Program

The NT Multi-level Assessment Program collects system-wide data on student achievement in reading and mathematics for years 5 and 7. It has operated since 1990.

The data reported is for urban non-indigenous students only. The percentage of both years 5 and 7 students tested who attained marks in the 81-and-above range for reading fell between 1990 and 1996. However, in numeracy, the percentage of students tested achieving results in the top two ranges grew for both year levels (Figure 2.21).

Figure 2.21: NT Multi-level Assessment Program results for years 5 and 7 students, 1990 and 1996, (percentage of students in marks range)



*Source*: Table 2A.98

## 2.6.12    Learning outcome patterns and trends

The available learning outcome tests point to some tentative conclusions about performance across the jurisdictions (the ABS literacy survey and the Third International Mathematics and Science Study) and over time (individual jurisdictions' learning outcome tests).

The results from the ABS survey and the Mathematics and Science Study indicate that Queensland, WA and SA tend to exhibit among the best outcomes, although they assess different age groups.

The different jurisdiction learning outcome tests give a mixture of results for different subject areas and year levels. However, they tend to show either a slight improvement in literacy and numeracy in recent years, or at least no evidence of any dramatic deterioration in performance.

## 2.6.13    Other schooling objectives

There continues to be little information with which to assess the performance of schools in meeting other specific social objectives, although information should be available in the near future. Indicators which were available, such as apparent retention rates, are relevant to both the learning and social objectives of education services. For example, the longer an individual attends school the greater is their potential to acquire knowledge, work skills and employment.

### *Student retention*

School retention rates (that is, the proportion of students who remain in school) are influenced by student perceptions of the benefits of schooling, alternative employment and education opportunities and population movements. Thus, short-term changes and variations between jurisdictions in apparent retention rates need to be interpreted cautiously. The figures reported also do not take into account students who study part-time because they refer only to full-time students.

Apparent retention rates to year 12 were relatively similar across the five most populous jurisdictions in 1996. The ACT had the highest retention rates. Unlike other jurisdictions, the ACT had a higher apparent retention rate for the government school sector than the ACT sector-wide rate. The transfer of students from other states and from non-government schools in years 11 and 12 contribute to high retention rates in ACT government schools. The NT and Tasmania had the lowest retention rates in 1996 (Figure 2.22).

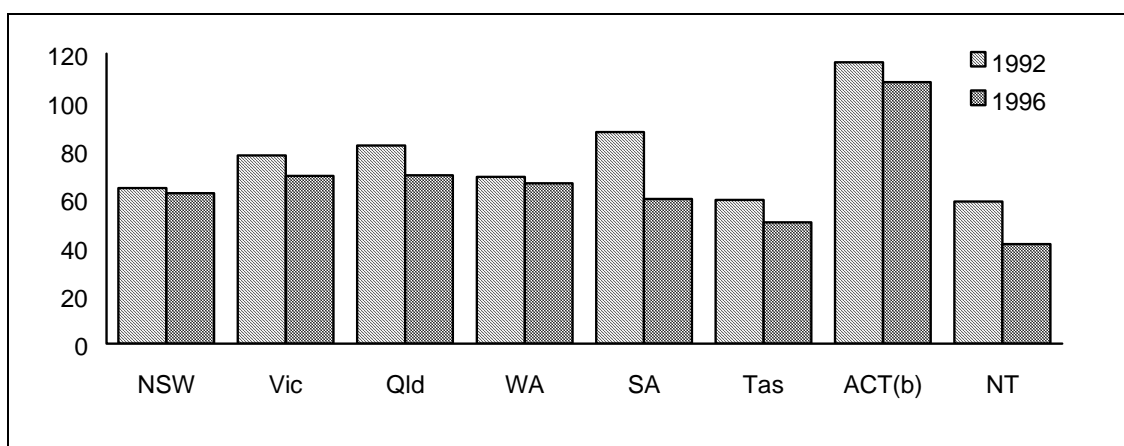Figure 2.22:    Year 12 apparent retention rates, 1996 (per cent)[a]
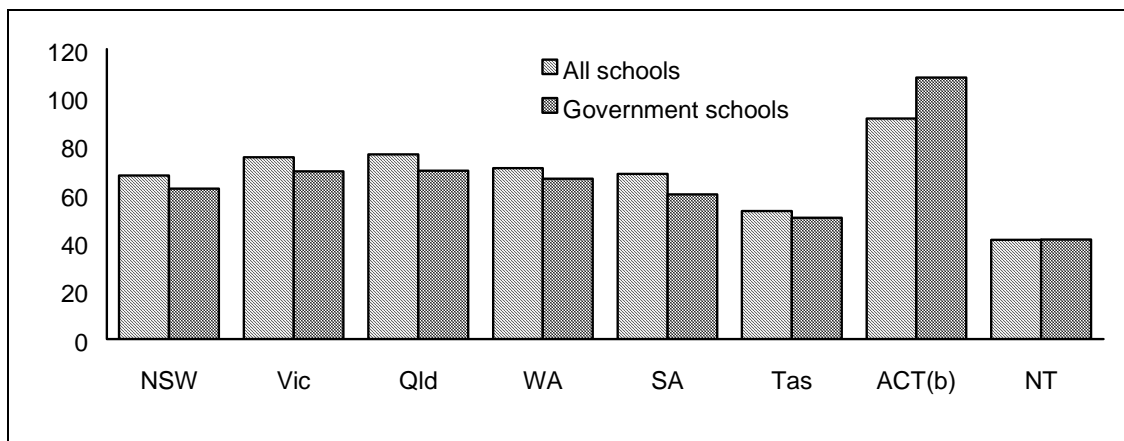


a    The apparent retention rates were based on full-time enrolments, therefore they depress retention rates for jurisdictions with higher proportions of part-time students, notably SA, Tasmania and the NT.
b    Retention rates greater than 100 per cent in the ACT reflected the migration of students from NSW and transfer of students from non-government schools.
*Sources*: Tables 2A.7; 2A.8

There has been a steady decline in retention rates for most jurisdictions from peaks reached in 1992 or 1993. Particularly large declines in retention rates occurred in SA and the NT (Figure 2.23).

Figure 2.23:    Year 12 apparent retention rates in government schools, 1992 and 1996 (per cent)[a, b]



a    The apparent retention rates were based on full-time enrolments, therefore they depress retention rates for jurisdictions with higher proportions of part-time students, notably SA, Tasmania and the NT.
b    Retention rates greater than 100 per cent in the ACT reflected the migration of students from NSW and transfer of students from non-government schools.
*Source*: Table 2A.7

## 2.6.14    Access and equity

Equity objectives can be assessed in terms of outcomes for special needs groups using indicators such as:

- completion rates;

- retention and participation rates; and

- learning outcomes.

Comparable jurisdictional data were often not available for special needs groups.

### *Year 12 completion rates*

Completion rates are estimated by comparing the number of year 12 completions [6] with the estimated populations that could have attended year 12 in that calendar year. Some national data are available for people from rural and remote areas and of low socio-economic status, but the data was not considered to be sufficiently reliable for reporting given the method by which these groups are classified.

### *Learning outcomes*

The 1996 National School English Literary Survey of years 3 and 5 students (discussed in Section 2.6.1) included results for students with a low socio-economic status, students from a non-English language speaking background and indigenous students (the latter based on a separate sample). Comparisons against national performance for reading and writing standards indicate that:

- fewer students tested from a non-English speaking background met the standards;

- the proportion of students tested from a low socio-economic background who met the standard was around 20 percentage points below that for students tested from a high socio-economic background; and

- low proportions (less than 30 per cent) of indigenous students tested met the standards (Figure 2.9).

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[6]   Year 12 certificates issued by the education authority.

## 2.7 Key performance results — efficiency

Efficiency is an issue for governments as owners and operators of government schools and as a major contributor of funds to the non-government sector. Given that governments provide only a portion of non-government school funds and do not have direct responsibility for their operations, the efficiency focus of this Report for school education overall is on the relationship between government expenditure and overall school education outcomes rather than how well all available resources are used.

### 2.7.1    Government expenditure per student

In-school[7] government expenditure[8] per student in government schools did not vary much across the six states ($4164 to $4525 for primary schools and $5974 to $6648 for secondary schools). It was somewhat higher in the NT ($5925 for primary schools and $9812 for secondary schools) and the ACT ($5058 for primary schools and $6800 for secondary schools). Out-of-school departmental overheads per student in government schools were lowest in NSW ($244) and Victoria ($245) and highest in the NT ($1098) and the ACT ($492) (Figure 2.24).[9]

Figure 2.24:    Education expenditure per full-time student in government schools, 1995–96 ($)[a]
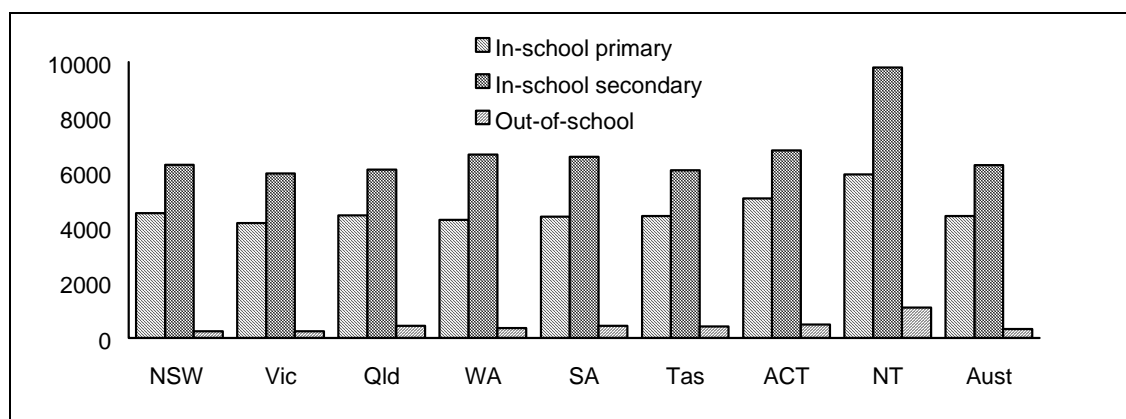


a    Commonwealth, State and Territory Government expenditure was for 1995–96 and student numbers for 1996.
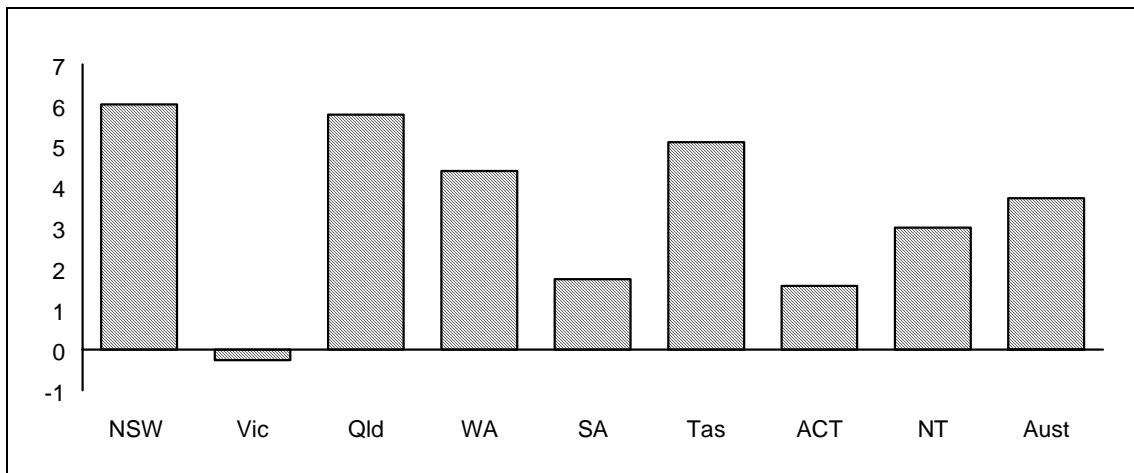*Source*: Table 2A.13

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7    In-school expenditure refers to expenditure at the school level.

8    Expenditure in this section refers to recurrent and capital expenditure.

9    Out-of school expenditure refers to department overheads.

Average annual changes in real expenditure per student showed considerable variation across jurisdictions for government schools between 1992 and 1995–96.[10] NSW (up 6 per cent) and Queensland (up 5.8 per cent) had the largest real expenditure rises, while Victoria (down 0.3 per cent) was the only jurisdiction to record a fall in real expenditure over the period (Figure 2.25).

Figure 2.25:   Average annual change in real expenditure per full-time student in government schools, 1992 to 1995–96 (per cent)[a]



a   Reporting changed from calendar year to financial year between 1992 and 1995–96.
*Source*: Table 2A.4

## 2.7.2   Students per full-time equivalent teacher

The NT had the lowest ratio of full-time students to full-time equivalent teachers for both primary (15) and secondary government schools (11). The ACT had the highest ratio for primary students (19) and Queensland had the highest ratio for secondary schools (14) (Figure 2.26).

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[10]  Reporting changed from calendar year to financial year between 1992 and 1995–96.

Figure 2.26:    Student–teacher ratios in government schools, 1996 (full-time students per full-time equivalent teacher)
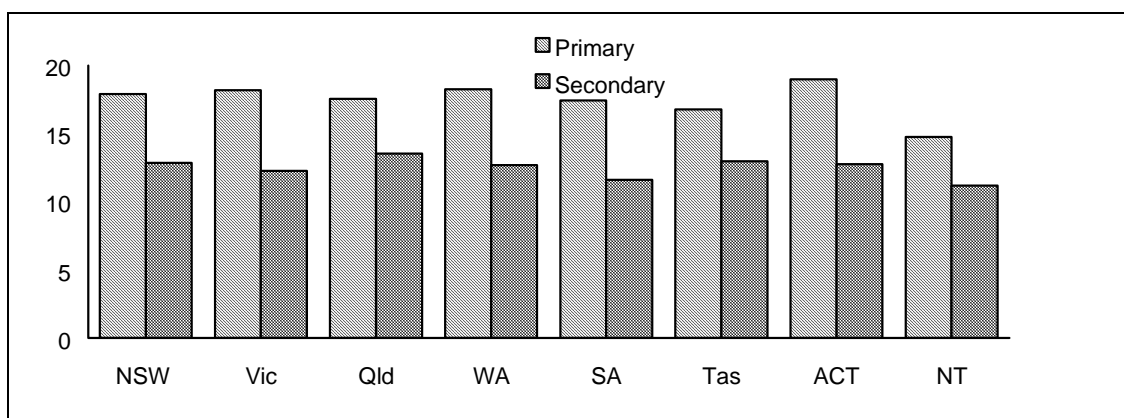


*Source*: Table 2A.13

While remaining in the national range, Victoria recorded the largest annual average increase in student-teacher ratios across jurisdictions, for both primary and secondary schools (3.3 per cent and 2.8 per cent respectively) between 1992 and 1996. The largest falls in the primary school student–teacher ratio were in NSW (down 2.7 per cent) and Tasmania (down 1.7 per cent), however, WA (down 0.6 per cent) reported the largest fall in the secondary student–teacher ratio over the same period (Figure 2.27).

Figure 2.27:    Average annual change in student–teacher ratios in government schools, 1992 to 1996 (per cent)[a,b,c]
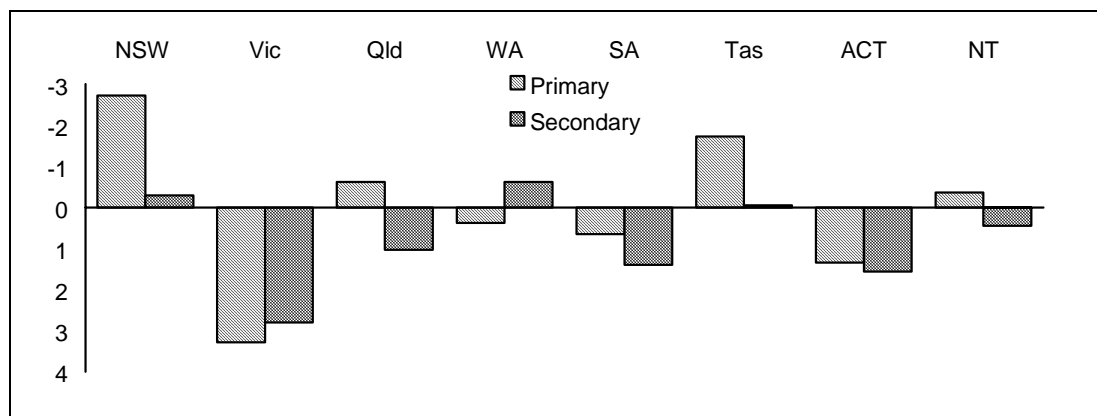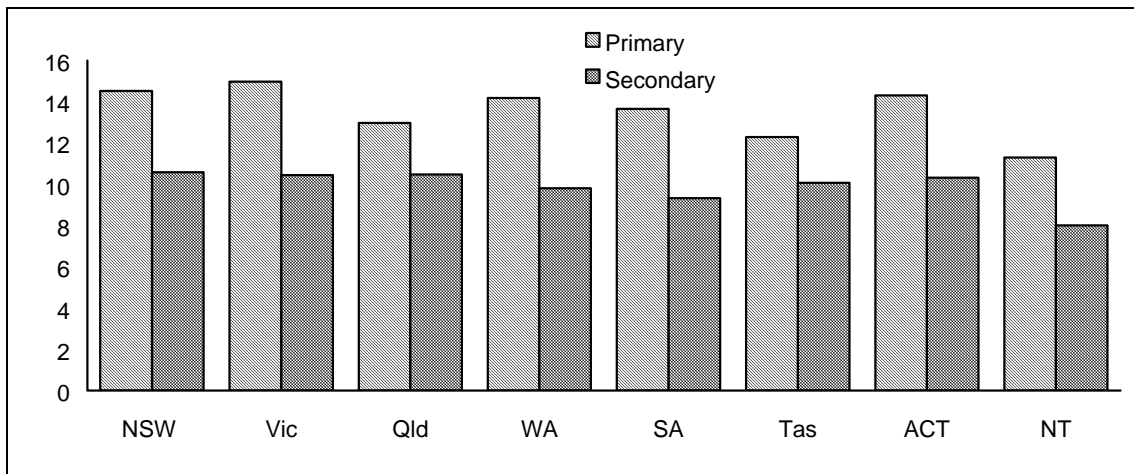


a    Student–teacher ratios defined as full-time students per full-time equivalent teacher.

b    A negative change in the student teacher ratio indicated an increase in the number of teachers per students.

c    Teacher data included: teaching staff; specialist support staff; administrative and clerical staff; and building operation, general maintenance and other staff. Changes in the level of any of these staff effect the student–teacher ratios.

*Source*: Table 2A.4

### 2.7.3   Students per full-time equivalent staff

The ratio of full-time students to full-time equivalent staff in government primary and secondary schools was also relatively similar across jurisdictions, except in the NT which had lower ratios for both school levels (11.3 for primary and 8.0 for secondary). Victoria had the highest primary student–staff ratio (15.0), and NSW had the highest secondary ratio (10.6) (Figure 2.28).

Figure 2.28:   Student–staff ratios, government schools, 1996 (full-time students per full-time equivalent staff)



*Source*: Table 2A.13